# **ELECTRICAL COMMUNICATION INDEX VOLUME 55 (1980)**

### Subject Index

1	Number	Pag
Advanced Techniques for Battlefield Surveillance Radars, J. M. Colin		32
P. A. Caballero, F. J. de los Rios, and I. Puebla		35· 24
		27
Bell Telephone Manufacturing Company Central Laboratory  Bidirectional Optical Link, W. K. Koester and F. Mohr	. 4	37: 34:
Bildschirmtext Center, Hierarchical System Control and its Application to the, R. Ertelt		33
Call Diverter, W. Johner		22
Call Processing in a Distributed Control System	. S* . 3	3° 210
Call Simulator, Local, W. Johner	. 3	21
Centralized Translation System for an International Pentaconta Exchange, F. Laliccia and M. Mayer		22
Computer Program for Optimizing the Structure of Analog/Digital Urban Networks,		
P. A. Caballero, F. J. de los Rios, and I. Puebla	. 4 . S*	354 24
Control Processor Analysis, Flexible Modeling and Simulation for,		
O. González Soto, J. Á. García Higuera, C. Díaz Berzosa, and L. Martínez Míguez		20
Service Offerings, D. Minoli	. 2	118
Data Multiplex System, Shipboard Optical Fiber, F. Pandozy  Demand Assignment Multiple Access System for Thin Route Networks,		304
M. Moons and T. Tack	. 1	70
Digital Exchange for a Wide Range of Applications	. S*	10
J. Braaten and J. Gjerløw	. 4	386
Digital Switching Network for Distributed Control, Expandable		16
Distributed Control, Expandable Digital Switching Network for	. S* . S*	16 37
Distributed Control System, Call Processing in a	S*	3:
DME for Microwave Landing System, Precision, F. Chiarini, M. Gori, G. Corazza, and G. Falciasecca	. 4	292
Dynamic Processor Overload Control for SPC Switching Systems, P. Somoza and A. Guerrero		37
ESCAL Florence about a Caricabia Fabranana		
ESCU Electromechanical Switching Enhancement,  C. Dall'Olio, G. Lanzi and L. Pizzini	3	249
Electromechanical Switching Enhancement, ESCU, C. Dall'Olio, G. Lanzi, and L. Pizzini	3	249
Expandable Digital Switching Network for Distributed Control		16
Evolution of the OPAS-II System, D. M. Davidson		184
FACE-Standard Central Laboratory	4	288
O. González Soto, J. A. García Higuera, C. Díaz Berzosa, and L. Martínez Míguez	1	26
Frequency Synthesizers for Radio Telephone Sets, Modern Multichannel, H. P. Ketterling		139
Front End Processor for Data Communication, R. H. Griffin	2	104
Fiber Optics:		
Optical Fiber Communication Systems in PTT Networkss, A. W. Horsley and E. S. Usher Shipboard Optical Fiber Data Multiplex System, F. Pandozy		268 304
Galileo System Design Method, F. Vidondo, I. Lopez, and J. J. Girod	4	364
F. Fernández Martínez and M. S. Aguilar Martínez	1	12
Hardware Structure of the Electronic Centralized Translation System, C. Maggio		235 334
Implementation of OPAS-I in the Swedish Telephone Network, P. Abrahamsson, E. Persson, and B. Jacobson	3	177
International Communications: Network Developments and Economics,		
B. M. Dawidziuk and H. F. Preston		127
International Data Switching, W. C. Crager ITT Communications Operations Group Services, G. F. Knapp		88 83
ITT Contributions to the Ninth International Teletraffic Congress, J. R. de los Mozos Marqués		7
TTT System 12 – Designed from the Future	S*	3
TTT USTS Digital Tandem Switching Network, R. J. Gibbs	2	96

ITT Communications Operations Group:	Number	Page
ITT Communications Operations Group Services, G. F. Knapp	. 2	83
International Data Switching, W. C. Crager	. 2	86 86
ITT USTS Digital Tandem Switching Network, R. J. Gibbs	. 2	96
Front End Processor for Data Communication, R. H. Griffin	. 2	104
Marsplus Multi-Access Reservation System, A. R. Miller		111
D. Minoli	. 2	118
ITT 1240 Digital Exchange:		
Call Processing in a Distributed Control System		31
Digital Exchange for a Wide Range of Applications		10
Expandable Digital Switching Network for Distributed Control		16
ITT System 12 – Designed from the Future  Maintenance Advantages of Distributed Control	. S* . S*	3 37
Network Terminals and Control Elements	. S*	24
Off-Line Support System		44
Overview		2
Killer Trunks on Grade of Service, Observation of the Effect of,		
F. Fernández Martínez and M. S. Aguilar Martínez	. 1	12
Laboratoire Central de Télécommunications	. 4	312
J. V. Baxter and K. A. Matthews	. 4	276
Large Scale Integration Techniques for Telecommunication, J. Cornu	. 4	376
Line Tester, Remote, E. Brading		202
Local Access Networks Using Common Carrier Bulk Service Offerings,	_	
Cost Effective Design of, D. Minoli	. 2	118
Local Call Simulator, W. Johner		217 316
LSI and Packaging Technology for Telecommunication Equipment,		
J. V. Baxter and K. A. Matthews		276
LSI for Telecommunications, J. Cornu	. 4	376
Maintenance Advantages of Distributed Control	. S*	37
Marsplus Multi-Access Reservation System, A. R. Miller	. 2	111
F. Chiarini, M. Gori, G. Corazza, and G. Falciasecca	. 4	292
Modern Multichannel Frequency Synthesizers for Radio Telephone Sets, H. P. Ketterling		139
Multiple Access System for Thin Route Networks, Demand Assignment,  M. Moons and T. Tack	. 1	70
Network Terminals and Control Elements	. S*	24
Ninth International Teletraffic Congress:		
Dynamic Processor Overload Control for SPC Switching Networks,		
P. Somoza, and A. Guerrero	. 1	37
Flexible Modeling and Simulation for Control Processor Analysis, O. González Soto, J. A. García Higuera, C. Díaz Berzosa, and L. Martínez Míguez	. 1	26
ITT Contributions to the Ninth International Teletraffic Congress,		
J. R. de los Mozos Marqués	. 1	7
F. Fernández Martínez and M. S. Aguilar Martínez	. 1	12
Parameters and Communication Efficiencies in the Modeling of a Packet Switching Network,  L. Martínez Míguez and O. Gonzalez Soto	1	46
Planning and Organization of the Ninth International Teletraffic Congress, J. E. Villar de Villacián		3
Traffic Imbalance in Subscriber Matrices,		
G. Morales Andrés, A. Crespo de Pedro, and M. García Rafart	1	18
Observation of the Effect of Killer Trunks on Grade of Service,  F. Fernández Martínez, and M. S. Aguilar Martínez	1	12
Off-Line Support System		44
OPAS:		
Evolution of the OPAS-II System, D. M. Davidson	3	184
Implementation of OPAS-I in the Swedish Telephone Network,	•	
P. Abrahamsson, E. Persson and B. Jacobson		177 169
Operator Position Service Systems, J. R. Cass and A. D. Smith  OPAS-II System, Evolution of the, D. M. Davidson		184
Operator Position Assistance System, J. R. Cass and A. D. Smith	3	169

I	Number	Page
Optical Fiber Communication Systems in PTT Networks, A. W. Horsley and E. S. Usher	. 4	268
Optical Fiber Data Multiplex System, Shipboard, F. Pandozy	4	304
Optical Link, Bidirectional, W. K. Koester and F. Mohr	. 4	342
Overload Control for SPC Switching Systems, Dynamic Processor,		
P. Somoza and A. Guerrero	. 1	37
Overview	. 1	2
Overview		82
Overview		162
Overview		258
Overview to Supplement	S*	2
		_
Packaging Technology for Telecommunication, LSI and, J. V. Baxter and K. A. Matthews		276
L. Martínez Míguez and O. González Soto	. 1	46
Parameters and Communication Efficiencies in the Modeling of a Packet Switching Network,		
L. Martínez Míguez and O. González Soto Pentaconta Exchange, Centralized Translation System for an International,		46
F. Laliccia and M. Mayer	. 3	225
Peripheral Devices for the Unimat 4080 PABX, H. D. Siebel Planning and Organization of Ninth International Teletraffic Congress,	. 1	57
J. E. Villar de Villacían	. 1	3
F. Chiarini, M. Gori, G. Corazza, and G. Falciasecca	. 4	292
Quality of Telephone Service, R. Mosch	2	146
Radars, Advanced Techniques for Battlefield Surveillance, J. M. Colin	4	323
Radar System for Meteorological Measurements, Zephyr, J. Isnard, M. Krass, and P. Stoll		63
Recent Achievements	1	76
Recent Achievements		153
Remote Line Tester, E. Brading		202
Remote Line Tester, E. Diading	3	202
Shipboard Optical Fiber Data Multiplex System, F. Pandozy	4	304
SPC Switching Systems, Dynamic Processor Overload Control for, P. Somoza and A. Guerrero		37
Speech Transmission, Low Bit Rate, F. R. Grassot and J. C. Voillaume		316
Standard Eléctrica Research Center		350
Standard Elektrik Lorenz Research Center		330
Standard Telecommunication Laboratories		264
Standard Telefon og Kabelfabrik Laboratory		382
		192
Subscriber Billing System, R. Cohen and J. B. Connell Support System, Off-Line		44
Support System, On-Line	3.	77
Technical Functions within a Multinational Company, J. Shields	4	259
Telecommunications Service Systems, L. A. Gimpelson	3	163
Telephone Service, Quality of, R. Mosch	2	146
Traffic Data, Automated System for the Acquisition of, L. Nombela		241
Traffic Imbalance in Subscriber Matrices,		271
G. Morales Andrés, A. Crespo de Pedro and M. García Rafart	1	18
Translation System for an International Pentaconta Exchange, Centralized,		
F. Laliccia and M. Mayer	3	225
Trunk Equipment, Universal Call Simulator for Testing, R. M. Metzger and E. Staber	3	210
Unimat 4080 PABX, Peripheral Devices for the, H. D. Siebel	1	57
United States Patents Issued to ITT System:		
April-June 1979	1	75
July-September 1979		152
October – December 1979	3	234
Universal Call Simulador for Testing Trunk Equipment, R. M. Metzger and E. Staber	3	210
• • • •		
Zephyr Radar System for Meteorological Measurements, J. Isnard, M. Krass, and P. Stroll	1	63

<sup>\*</sup> S = Supplement to Volume 55, number 2 (1980)

## **ELECTRICAL COMMUNICATION INDEX VOLUME 55 (1980)**

#### **Recent Achievements**

I	Number	Page
Algerian Telephone Factory Inaugurated	. 2	156
Bitplexer for Telegraph and Data Transmission	. 2	153
Bothway Infrared Communication		159
Currency Exchange Terminal for Heathrow Airport	. 1	76
Data Modems 2082 and 2084	. 2	160
Deep-Water Optical Fiber Undersea Telephone Cable Installed	. 2	156
Electronically Scanned Antenna		159
Fiber Optic Transmission Systems for British Post Office	. 1	80
Field Deployable Optical Cable		155
Field Trial of 120 Mbit s <sup>-1</sup> TDMA System	. 2	157
Fifth Metaconta 11 A Exchange for Finland		77
First Undersea Telephone Cable System in the Indian Ocean		77
Gunn Diode Millimetric Wave Sources	. 1	77
Hundredth TXE 4 Electronic Exchange for British Post Office	. 2	153
Main Cable with 320 Optical Fibers Installed	. 2	154
Major Orders for Push-Button Telephones	. 2	154
Microprocessor Controlled Trunk Test Desk		78
Military VHF Equipment		155
New Exchanges for Dakar		79
Oil Pollution Control Equipment for Japanese Built Tankers	. 2	157
Parametric Amplifier for Spacelab		80
Rack Mounted Data Moderns RMS 80	. 1	79
Remote Acquisition Unit Qulifies for Spacelab	. 1	79
State-of-the-Art Aluminum Electrolytic Capacitor	. 1	78
Synoptical Didactic Board	. 2	157
TAT-7 Transatlantic Telecommunications Link		80
Three Major Companies Develop Fiber Optic Standard		158
Unimat 4070 Medium Size PABX		158
Viewdata Center for Deutsche Bundespost		76
Wide-Area Radionagers for British Post Office		160

## **ELECTRICAL COMMUNICATION INDEX VOLUME 55 (1980)**

### **Author Index**

	Number	Page
Abrahamsson, P., Jacobson, B., Persson, E., Implementation of OPAS-I in the		
Swedish Telephone Network		177
on Grade of Service		12
for Telecommunication Equipment	. 4	276
Braaten, J., Gjerløw, J., Digital Processing Techniques for Integrated Service Networks		386
Brading, E., Remote Line Tester  Caballero, P. A., de los Rios, F. J., Puebla, I., Computer Program for Optimizing the Structure		202
of Analog/Digital Urban Networks  Cass, J. R., Smith, A. D., Operator Position Assistance System		354 169
Chiarini, F., Gori, M., Corazza, G., Falciasecca, G., Precision DME for Microwave Landing System		292
Cohen, R., Connell, J. B., Subscriber Billing System	. 3	192
Colin, J. M., Advanced Techniques for Battlefield Surveillance Radars	. 4	323
Connell, J. B.: see Cohen, R.		
Corazza, G.: see Chiarini, F.		
Cornu, J., Large Scale Integration Techniques for Telecommunication		376
Crager, W. C., International Data Switching	. 2	88
Crespo de Pedro, A., García Rafart, M., Morales Andrés, G.,	4	40
Traffic Imbalance in Subscriber Matrices  Dall'Olio, C., Lanzi, G., Pizzini, L., ESCU/CORU System for Electromechanical	. 1	18
Switching Enhancement	. 3	249
Davidson, D. M., Evolution of the OPAS-II System	. 3	184
Dawidziuk, B. M., Preston, H. F., International Communications:		
Network Developments and Economics	. 2	127
de los Mozos Marqués, J. R., ITT Contributions to the Ninth International Teletraffic Congress		7
de los Rios, F. J.: see Caballero, P. A.		
Díaz Berzosa, C., García Higuera, J. A., González Soto, O., Martínez Míguez, L.,		
Flexible Modeling and Simulation for Control Processor Analysis		26
Ertelt, R., Hierarchical System Control and its Application to the Bildschirmtext Center	. 4	334
Falciasecca, G.: see Chiarini, F.		
Fernández Martínez, F.: see Aguilar Martínez, M. S.		
García Higuera, J. A.: see Díaz Berzosa, C. García Rafart, M.: see Crespo de Pedro, A.		
Gibbs, R. J., ITT USTS Digital Tandem Switching Network	. 2	96
Gimpelson, L. A., Telecommunications Service Systems	. 3	163
Girod, J. J., Vidondo, F., Lopez, I., Galileo System Design Method		364
Gjerløw, J.: see Braaten, J.		
González Soto, O.: see Díaz Berzosa, C.		
González Soto, O., Martínez Míguez, L., Parameters and Communications Efficiencies in the Modeling		
of a Packet Switching Networks	. 1	46
Gori, M.: see Chiarini, F.	4	21/
Grassot, F. R., Voillaume, J. C., Low Bit Rate Speech Transmission		316 104
Guerrero, A., Somoza, A., Dynamic Processor Overload Control for SPC Switching Systems	. 2	37
Horsley, A. W., Usher, E. S., Optical Fiber Communication Systems in PTT Networks	. 4	268
Isnard, J., Krass, M., Stoll, P., Zephyr Radar System for Meteorological Measurements		63
Jacobson, B.: see Abrahamsson, P.		
Johner, W., Local Call Simulator	. 3	217
Johner, W., Call Diverter		221
Ketterling, H. P., Modern Multichannel Frequency Synthesizers for Radio Telephone Sets		139
Knapp, G. F., ITT Communications Operations Group Services		83
Koester, W. K., Mohr, F. A., Bidirectional Optical Link	. 4	342
Krass, M.: see Isnard, J. Laliccia, F., Mayer, M., Centralized Translation System for an International		
Pentaconta Exchange	. 3	225
Lanzi, G.: see Dall'Olio	. ,	225
Lopez, I.: see Girod, J. J.		
Maggio, C., Hardware Structure of the Electronic Centralized Translation System	. 3	235
Martínez Míguez, L.: see Díaz Berzosa, C.		
Martínez Míguez, L.: see González Soto, O.		
Matthews, K. A.: see Baxter, J. V.		
Mayer, M.: see Laliccia, F.		
Metzger, R. M., Staber, E., Universal Call Simulator for Testing Trunk Equipment		210
Miller, A. R., Marsplus Multi-Access Reservation System  Minoli, D., Cost Effective Design of Local Access Networks Heige Common Cornier	. 2	111
Minoli, D., Cost Effective Design of Local Access Networks Using Common Carrier  Bulk Service Offerings	. 2	118
Mohr, F. A.: see Koester, W. K.	. 4	110
Moons, M., Tack, T., Demand Assignment Multiple Access System for Thin Route Networks	. 1	70
Morales Andrés, G.: see Crespo de Pedro, A.	-	. •
Mosch, R., Quality of Telephone Service	. 2	146

	Number	Page
Nombela, L. F., Automatic Traffic Data Acquisition Network	3	241
Pandozy, F., Shipboard Optical Fiber Data Multiplex System	4	304
Persson, E.: see Abrahamsson, P.		
Pizzini, L.: see Dall'Olio, C.		
Preston, H. F.: see Dawidziuk, B. M.		
Puebla, I.: see Caballero, P. A.		
Shields, J., Technical Functions within a Multinational Company	4	259
Siebel, H. D., Peripheral Devices for the Unimat 4080 PABX	1	57
Smith, A. D.: see Cass, J. R.		
Somoza, A.: see Guerrero, A.		
Staber, E.: see Metzger, R. M.		
Stoll, P.: see Isnard, J.		
Tack, T.: see Moons, M.		
Usher, E. S.: see Horsley, A. W.		
Vidondo, F.: see Girod, J. J.		
Villar de Villacían, J. E., Planning and Organization of the Ninth International		
Teletraffic Congress	1	3
Voillaume, J. C.: see Grassot, F.		